

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 27. (Canceled).

28. (Currently Amended) A packet transfer method resolution server comprising:
a packet transfer method database where correspondences between several types of information contained in a packet and one or more type of information related to a packet transfer method are registered, wherein the several types of information contained in a packet include URL data, destination IP address data, and VLAN-ID data, and wherein the one or more type of information related to a packet transfer method that are registered include source IP address data, destination MAC address data, and VLAN-ID data, wherein the several types of information contained in a packet and the one or more type of information related to a packet transfer method are registered in the packet transfer method database as a one-to-one correspondence with respect to a URL data entry, a destination IP address data entry, a VLAN ID data entry, a source IP address data entry, a destination MAC address data entry, and a VLAN-ID data entry, and

a packet transfer method resolution request acceptance section that accepts a packet transfer method resolution request from a packet transfer equipment that transfers a received packet to another node inquiring the information related to a transfer method of said received packet and specifying information contained in said received packet, refers to said packet transfer method database, and provides the one or more type of information related to the transfer method of said received packet to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method,

wherein:

the one or more type of information provided to said packet transfer equipment as the information related to the packet transfer method contains each of:

the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and

the information related to the resource control method for the route through which the received packet is transferred.

29. (Previously Presented) The packet transfer method resolution server as set forth in claim 28 further comprising:

a resource information collection section that collects resource information in a network; and

an entry rewriting section that rewrites entries registered to said packet transfer method database based on the resource information in said network collected by said resource information collection section.

30. (Currently Amended) A packet transfer method resolution server comprising:

a packet transfer method database where correspondences between several types of information contained in a packet and one or more type of information related to a packet transfer method are registered, wherein the several types of information contained in a packet include URL data, destination IP address data, and VLAN-ID data, and wherein the one or more type of information related to a packet transfer method that are registered include source IP address data, destination MAC address data, and VLAN-ID data, wherein the several types of information contained in a packet and the one or more type of information related to a packet transfer method are registered in the packet transfer method database as a one-to-one correspondence with respect to a URL data entry, a destination IP address data entry, a VLAN ID data entry, a source IP address data entry, a destination MAC address data entry, and a VLAN-ID data entry;

a packet transfer method resolution request acceptance section that accepts a packet transfer method resolution request from a packet transfer equipment that transfers a received packet to another node inquiring the information related to a transfer method of said received packet and specifying information contained in said received packet, refers to said packet transfer method database, and provides the one or more type of information related to the transfer method of said received packet to said packet transfer equipment; and

a resource control request section that, if resource control for other nodes in the network is necessary, sends a request for resource control of said other nodes as additional information of said transfer method when said packet transfer method resolution request

acceptance section provides the information related to said transfer method in response to said packet transfer method resolution request from said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

31. (Previously Presented) The packet transfer method resolution server as set forth in claim 30 further comprising:

a packet transfer policy description section that describes a policy to control the information related to said transfer method replied by said packet transfer method resolution request acceptance section in response to said packet transfer method resolution request from said packet transfer equipment, and

an entry rewriting section that rewrites entries registered to said packet transfer method database based on said policy described in said packet transfer policy description section.

32. – 37. (Canceled).

38. (Withdrawn) A DNS server comprising:

an IP address/FQDN correspondence database having an IP address corresponding to a FQDN and the FQDN corresponding to the IP address stored therein where the FQDN or the IP address in a packet transfer equipment that transfers a received packet to another node uniquely indicating several types of information contained in said received packet and the FQDN or the IP address uniquely indicating one or more type of information related to a transfer method of said received packet are associated;

a DNS resolution request acceptance section that accepts an IP address resolution request inquiring the IP address corresponding to the FQDN from a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and provides the FQDN corresponding to said IP address to said packet transfer equipment; and

a resource control request section that, if resource control for other nodes in a network is judged necessary, sends a request for the resource control to said other nodes when said DNS resolution request acceptance section provides the IP address corresponding to said FQDN and the FQDN corresponding to said IP address in response to said IP address resolution request and said FQDN resolution request from said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

39. (Withdrawn) The DNS server as set forth in claim 38 further comprising:

a packet transfer policy description section that describes a policy to control the IP address corresponding to said FQDN and the FQDN corresponding to said IP address replied by said DNS resolution request acceptance section in response to a IP address resolution request and said FQDN resolution request from said packet transfer equipment, and

an entry rewriting section that rewrites entries registered to said IP address/FQDN correspondence database based on said policy described in said packet transfer policy description section.

40. – 54. (Canceled).

55. (Previously Presented) The packet transfer method resolution server as set forth in claim 28, wherein, when the request for the resource control is not accepted by said other nodes, retrials of the request for resource control are made up to a predetermined number of times at future times until one of the retrials is accepted, and wherein if none of the retrials is accepted, a message is output indicated that no applicable entry has been found in the packet transfer method database.

56. (Withdrawn) The DNS server as set forth in claim 38, wherein, when the request for the resource control is not accepted by said other nodes, retrials of the request for resource control are made up to a predetermined number of times at future times until one of the retrials is accepted, and wherein if none of the retrials is accepted, a message is output indicated that no applicable entry has been found in the IP address/FQDN correspondence database.

57. (New) The packet transfer method resolution server as set forth in claim 28, further comprising a second packet transfer method database which stores all of the information stored in the packet transfer method database, along with a destination port number related to a packet transfer method,

wherein when a packet transfer method for the received packet cannot be resolved based on the information stored in the packet transfer method database, the second packet transfer method database is utilized to determine a particular packet transfer method to transfer the received packet.

58. (New) The packet transfer method resolution server as set forth in claim 30, wherein, when the request for the resource control is not accepted by said other nodes, retrials of the request for resource control are made up to a predetermined number of times at future times until one of the retrials is accepted, and wherein if none of the retrials is accepted, a message is output indicated that no applicable entry has been found in the packet transfer method database.

59. (New) The packet transfer method resolution server as set forth in claim 30, further comprising a second packet transfer method database which stores all of the information stored in the packet transfer method database, along with a destination port number related to a packet transfer method,

wherein when a packet transfer method for the received packet cannot be resolved based on the information stored in the packet transfer method database, the second packet transfer method database is utilized to determine a particular packet transfer method to transfer the received packet.